

REMARKS

Claim 33 has been amended by adding the additional steps recited in claims 36 and 37. Entry and consideration of this amendment is therefore as a matter of right since no new issues are being raised.

In the Examiner's opinion, the features of claims 36 and 37 are disclosed by Shigematsu, and a person skilled in the art would combine the teaching of Pitchforth and Shigematsu to arrive at the claimed invention. However, the applicant does not agree with that.

Firstly, the Examiner failed to explain what would be the motivation of the skilled person to combine these teachings. The fact that both references relate to optical telecommunications networks is not enough.

Pitchforth is silent about using EDFA and provides no suggestion at all that would lead a skilled person towards using EDFA in a solution defined by Pitchforth. Shigematsu discloses and discusses using EDFA, but fails to provide any information that would lead the skilled person to a conclusion that using EDFA would improve the solution disclosed by Pitchforth. What the Examiner presented in his analysis is that these two references existed at the time of making the present invention. In consequence, the Examiner only showed that the skilled person could theoretically combine them (because they existed), but failed to show that the skilled person would indeed be motivated to combine them.

The Examiner made a comment that Pitchforth teaches that the OTDR logic is implemented at each of the amplifier sites, thereby suggesting that the amplifier is capable of being configured as claimed. The applicant does not understand what forms the basis for this conclusion, because the only thing Pitchforth discloses/suggests is having OTDR at the amplifier's sites.

Pitchforth says nothing about these amplifiers being EDFAs. Hence, how could Pitchforth suggest a very specific configuration of an EDFA amplifier?

Moreover, the applicant would like to draw the Examiner's attention to the fact that claim 36 (now claim 33) clearly refers to configuring the optical component to be receive EDFA, and not configuring OTDR to be EDFA, as the Examiner seems to read claim 36.

Secondly, even if one were to combine the teachings of Pitchforth and Shigematsu, the resulting solution would not be that defined in the amended claim 33. The amended claim 33 (by incorporating the limitations of claim 37) requires:

“controlling isolation of an input isolator of the receive EDFA such that, in the absence of an input signal thereto, at least one optical signal in the form of amplified spontaneous emission noise escapes from an input of the receive EDFA and is introduced into the optical fiber cable.”

This feature is neither disclosed in, nor suggested by, Shigematsu. Isolation, in Shigematsu's solution, is not controlled; it is fixed constant in a way that the isolator is a non-reciprocal element. There is nothing to control in it, as it simply lets optical signals go through in only one direction, and blocks optical signals in the opposite direction.

Shigematsu discloses a solution in which the arrangement isolator -- EDFA -- isolator is bypassed, but this is not a control of the operation of an isolator, as there is no change in any of the isolator's parameters. If, however, the Examiner would try and argue that this is a form of control, then the applicant would like to point that, in any case, Shigematsu's solution would not let any ASE noise escape if there is no input signal, which is a requirement of the amended claim 33. This would not occur in Shigematsu's solution, because the isolators are non-reciprocal, and it is the

bypass that allows signals to go in the direction opposite to the direction of the isolators. In this situation, the ASE noise is still blocked (because the isolators are not re-configured or re-arranged) and does not escape into the optical fiber cable.

In consequence, for the reasons given above, the amended claim 33 is novel and non-obvious, together with its dependent claims.

Wherefore, a favorable action is earnestly solicited.

Respectfully submitted,

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